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CASES OF OVARIOTOMY.

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CASE I. — M. P., a married woman, thirty-three years of age, entered the Massachusetts General Hospital, November 7, 1874. Five years ago, immediately after her sixth confinement, she noticed a tumor in the left iliac region about the size of a cocoa-nut. This gradually increased in size, and was accompanied by occasional attacks of severe darting pain in the abdomen. Two and a half years later, the tumor then being about the size of an adult head, the woman again became pregnant, and at full term, after an easy labor, gave birth to a child which she says weighed fourteen pounds.

The tumor now grew more rapidly, and the pains in the abdomen, which had entirely disappeared during the last six months of gestation, returned with greater frequency. Two weeks previous to her entrance to the hospital the patient was seized with severe pain over the whole abdomen, which was very tender on pressure. This pain and tenderness soon passed off, leaving her as well as before. I saw her soon after, in consultation with Dr. Ellis, in whose ward she then was. The diagnosis of ovarian cyst had already been established, and confirmed by aspiration. The fluid, which was of a yellowish-brown color, contained finely divided fat with some crystals of cholesterine. The tumor, which was of a smooth, globular form, extended from the pubes nearly to the ensiform cartilage, and equally into either flank. It was adherent over a large part of the abdominal wall. On vaginal examination the uterus was found to be normal in both size and position, and freely movable. An operation was decided upon, and, it being deemed desirable to remove the patient as much as possible from hospital influences, by the liberality of the trustees of the hospital a pleasant, airy room was provided in a private house.

On December 6th, with the assistance of Drs. C. B. Porter and J. C. Warren, I operated after the method described and practiced by Spencer Wells. After puncturing the cyst, a sheet of thin rubber pellicle, with a hole in the middle, was slipped on over the trocar and tied

with rubber tubing behind the opening in the sac, thus preventing leakage, which had already commenced, from reaching the abdomen. Extensive adhesions to the abdominal walls, omentum, and intestines were separated by the hands without causing any bleeding of importance. The pedicle, which was quite long and thick, was clamped and brought out through the incision, whose edges were united by means of carbolized silk sutures. Cotton-wool dressings saturated with carbolic oil were then applied, and the patient was put to bed.

The sac, which was quite thick, had growing from the inner wall a number of small bunches of hair, and one well-formed incisor tooth; it contained seven pints of an opaque fluid, of the color of *café au lait*; suspended in it were numerous cheesy lumps and some free hairs.

The patient vomited somewhat upon coming out of the ether. One third of a grain of sulphate of morphia was introduced into her arm. During the afternoon she was entirely free from pain, but vomited moderately two or three times. She took milk and lime-water in small quantities. At six P. M., seven hours after the operation, her temperature was 102.7° ; pulse 112.

In the night she vomited slightly, and had a fit of dyspnœa with suffocative cough.

December 7th. She was comfortable in every respect; took milk and lime-water, and beef-tea. Her average temperature was 102.9° ; pulse 124.

December 8th. Still free from pain, but somewhat troubled by cough and dyspnœa, for which she took small doses of carbonate of ammonia and ipecac. Average temperature 102.6° ; pulse 116.

December 9th. The dressings were removed, and the wound found united throughout the greater part. Two deep sutures were removed. The patient was comfortable all day. Average temperature 102.1° ; pulse 109.

December 10th. The remaining sutures were removed, the clamp unscrewed, and the slough on the pedicle cut off. Average temperature 101° ; pulse 107.

The patient convalesced rapidly after this, although an ulcer remained for some time where the pedicle had been brought through the incision. January 9th she menstruated; she noticed no difference between this and former menstruations. March 3d she was discharged, there being at that time a granulating surface about the size of a five-cent piece.

CASE II. — A. F., twenty-three years old, married, entered the Massachusetts General Hospital February 1, 1875. She had been married fifteen months, but had had no children. One year ago she first noticed in the abdomen a swelling, which began in the right side, and increased in size steadily and rapidly. During the last five months she has had more or less pain in the abdomen. She has lost much flesh and strength.

From the time she first noticed the tumor her bowels were loose till two months ago, since which time they have been constipated. Catamenia used to be irregular, but they have been regular during the last two years till eight weeks ago, when she began to flow, and has continued to do so up to the present time.

I saw her in consultation with Dr. Ellis. The tumor filled the abdomen from the ensiform cartilage to the pubes, extending equally into both sides. It was divided into several parts by ill-defined sulci, and was found by palpation to consist of several distinct cysts. A superficial wave of fluctuation could be detected, indicating the co-existence of ascites. On a vaginal examination the sound would not enter the cavity of the uterus, which was strongly anteverted and fixed. The diagnosis was made of a multilocular cyst, either adherent to the posterior wall of the uterus, or attached to it by a very short pedicle. Although the condition of the woman, and the apparent close connection between the cyst and the uterus, made the case an unfavorable one for surgical interference, yet an operation was decided upon as giving her the best, and in fact the only chance of recovery. The same room was procured which was occupied in the previous case.

I operated on February 20th, assisted by Drs. Porter and Warren. There were no unusual features about the operation. The abdomen contained several pints of ascitic fluid. The tumor was multilocular, and adherent to the abdominal wall, to the omentum, intestine, and brim of the pelvis. Two bleeding points in the omentum were tied. Four cysts required puncture. The pedicle was found to be long and thin. The right Fallopian tube had attached to it several small cysts. The left Fallopian tube was distended with serous fluid, which was let out by a small puncture. The right cornu of the uterus was elongated, and had attached to the end a wen about the size of a horse-chestnut. This latter was removed, and the bleeding stopped by actual cautery. The pedicle was brought out through the lower angle of the wound, which was closed by silk sutures, and covered with a dressing of cotton-wool and carbolic oil. The tumor, which was composed of an innumerable number of cysts, great and small, contained a turbid serous fluid, and with its contents weighed twenty-four pounds.

The patient vomited moderately on coming out of her ether, and continued to retch at intervals for two hours; she then began to have pain in the lower part of the abdomen and in the pelvis; this was controlled by a quarter of a grain of sulphate of morphia given subcutaneously. She was comfortable through the afternoon, dozing much of the time. At 4 P. M. her temperature was 102.3°; pulse 108. At 5.30 P. M. her temperature was 103.1°; pulse 118. She was bright and comfortable, though with a slight feeling of nausea. At 8 P. M. she began to retch and vomit. She was given small pieces of ice to suck,

and soda water in small quantities; this, however, failed to control the vomiting, which continued all night. In the morning an enema of beef-tea was given, but it immediately returned. She failed rapidly, and died, exhausted, about twenty-six hours after the operation.

Autopsy. — The incision was united everywhere except around the pedicle; the deeper parts especially were very firmly united. The abdominal cavity contained about two thirds of a pint of bloody serum. The intestines were covered with lymph, and firmly glued together and to the anterior abdominal wall. The left ovary, which had appeared normal at the time of the operation, was in a state of very acute inflammation. The mistake of diagnosing close adhesions between the tumor and the uterus was explained by the elongated form of that organ, which caused it to be jammed by the tumor across the superior strait of the pelvis and firmly held there.

I have lately received from a woman whom I operated upon in the summer of 1869 a letter, of which I will give a brief abstract.

She entered the hospital in the latter part of May of that year. She was in a very exhausted condition, due in a great degree to a long-continued violent purging which she had undergone with the hope of reducing the tumor, but which, failing in its object, had greatly reduced the patient. At her earnest entreaty she was operated upon earlier than would have otherwise been deemed advisable, and while still quite weak. The tumor was unilocular and non-adherent. The pedicle, which was too short to reach the incision, was tied and dropped back into the abdomen, the ligature being brought out through the incision. She made a slow recovery.

Soon after her return home she was married, and has since been once confined. She writes that her health has not been as good as it was previous to the spring of 1869. She has not been troubled by pain in the abdomen. Her catamenia were regular until her confinement, but since then have been irregular, and she has been troubled somewhat with leucorrhœa. Her labor was a hard one, and the child, which was still-born, was a female, well nourished, and weighing nine pounds. She felt quite well after confinement, but thinks that she overworked herself at this time, as she has not been as well since. She feels better during pregnancy than at other times. She is now pregnant for the second time, and, with the exception of neuralgia about the head, is quite well.

[A note received while the foregoing was in press states that the woman was delivered, April 27th, of a healthy boy weighing ten pounds; the labor was normal.]

CEREBRAL SYMPTOMS DUE TO DISEASE OF THE EAR.
(MÉNIÈRE'S DISEASE.)

BY S. G. WEBBER, M. D., OF BOSTON.

MANY patients complain of dizziness and noises in their ears, with other symptoms causing discomfort. The dizziness seems to be the most distressing sensation in some cases; in others the noises in the ears cause the most trouble, or there may be headache, nausea, and vomiting. Trousseau called attention to the fact that cases supposed to be apopleciform cerebral congestion are generally epileptic in character. Ménière referred many such cases to disease of the internal ear. The conclusions at which he arrives from the study of a large number of cases are given in the proceedings of the Académie de Médecine for January 8, 1861:—

"1. An auditory apparatus previously healthy may become suddenly the seat of functional disturbance, consisting in noises of different kinds, continued or intermittent, and these noises are soon accompanied with a greater or less diminution of hearing.

"2. These functional disturbances, situated in the internal organs of hearing, may give rise to symptoms apparently cerebral, such as vertigo, giddiness, uncertain gait, circus movement, and falling, and moreover they are accompanied with nausea, vomiting, and a condition of syncope.

"3. These symptoms, which are intermittent, are quickly followed by deafness more or less complete; and frequently the hearing is suddenly and completely lost.

"4. There is reason to believe that the organic lesion which is the cause of these functional disturbances is situated in the semicircular canals."¹

In consequence of this communication, attention was called more particularly to this lesion; and M. Ménière has himself published a detailed account of several cases. He reports one in which the autopsy showed disease of the semicircular canals. A young girl was received into the hospital having severe vertigo; the slightest motion caused vomiting. The brain, cerebellum, and cord were healthy. A reddish plastic exudation filled the semicircular canals; hardly any traces of this were found in the vestibule, and none in the cochlea.²

These communications have caused M. Ménière's name to be associated with such attacks depending upon disease of the internal ear. Dr. Deleau (jeune) has, however, claimed priority in describing this condition, as he published in 1838 a *brochure* entitled *Des Effets pathologiques de quelques Lésions de l'Oreille moyenne sur les Muscles de l'Expression faciale, sur l'Organe de la Vue et sur l'Encéphale.*"³

¹ Bulletin de l'Académie de Médecine, xxvi.

² Gazette médicale de Paris, 1861, page 598.

³ Gazette médicale de Paris, 1861, page 50.

I have not seen this book, and can therefore say nothing about this claim. Brown-Séquard pointed out that irritation of the auditory nerve would cause vertigo and convulsive and rotatory movements.¹

During my term of service in the department for nervous diseases at the Boston Dispensary, several cases were seen illustrating the connection between lesion of the ear and the symptoms referred to.

John C., aged thirty-seven, had felt dizzy for three or four weeks before presenting himself at the dispensary; he was worse when he looked up suddenly; the dizziness had been steadily increasing; he thought his hearing was as good as usual, but there was evidently a marked diminution of this function, though it was not tested by a watch. He had no tinnitus, no headache, but at times neuralgia on the left side of his head in the temporal region. There had been a slight pain in his right arm for a short time. Both membranes were found opaque and slightly congested at their upper part. He was referred to the Eye and Ear Infirmary, and Dr. C. J. Blake diagnosed chronic catarrhal inflammation of the middle ear. The man said that after one insufflation he felt better.

Another patient, after taking a bath in the salt water, was dizzy and had noises in his head; there was a slight headache and inability to walk straight; there was also a sense of choking and dyspnoea, with pain in the left side on exertion; at times his eyesight was dim. These symptoms had continued fifteen or sixteen months when he came to the dispensary. His face was bloated, there was no paralysis of the face or tongue. A watch could be heard at a distance of an inch with the right ear, only on contact with the left. Once in a while the patient sighed heavily. Both ears were packed full of wax. Glycerine was dropped in, and two days later an attempt was made to syringe the wax out. A plug about half or three quarters of an inch long was removed from one ear, that in the other could not be started. Two days later the second plug of cerumen was removed. At that visit he expressed himself as much relieved; his hearing was better, he looked brighter and less distressed. He was told to return at the end of a week, but has not been seen since.

Another patient, after a cough and cold, had headache and was dizzy; the ground seemed to turn round. His gait with his eyes shut was very unsteady; he staggered to the right, somewhat as a patient with locomotor ataxia; he could not stand with his eyes shut and his feet near together. He heard a watch with the left ear at about a foot distance; with the right at about two feet. A large plug of wax was in the left ear. The right membrane was thick, of a dull color, and concave. He was referred to the Eye and Ear Infirmary.

¹ Lectures on the Physiology and Pathology of the Central Nervous System, 1860, page 195.

Flourens first called attention to the effects of lesion of the semicircular canals. His experiments have since been repeated by many observers.

When the horizontal canals of an animal are injured, he turns his head from side to side, and finally his body partakes of this motion and rotation follows. When the inferior vertical canals are injured, the head is moved up and down, and the animal has a tendency to turn somersaults backwards. When the superior vertical canals are injured, the motion of the head is likewise up and down, but the tendency is to turn somersault forwards. In most cases of disease all the semicircular canals are probably affected, and a result is obtained similar to that found in animals in which these are all injured. There is a confused sensation of loss of equilibrium, and this may be so severe as to lead to vomiting and inability to walk, or even to temporary loss of consciousness.

The cases reported above were all of a rather mild character. Several years since, I saw among my private patients a lady with a peculiar combination of symptoms, of which some explanation may be found in the experiments referred to above. The lady was over fifty years old, and had been a sufferer for eight or nine years. At first she had dizzy spells only two or three times a year. About five years before I saw her she had a dull pain in her head, a distress in the head, and noises in the right ear; sometimes a "fluttering between both ears;" then a clicking in the right ear, a sawing, roaring noise; then all would be still, and she would soon experience a "shock" even to the end of her toes, comparable to an electric shock; there had been, finally, a tendency also to jerk the head backwards. There was no motor or sensory disturbance in the limbs, but a slight numbness on one side of the head. At first objects seemed to swim around her, but this sensation had changed so that it seemed to her as though she was pitching over and over around an axis passing through the body from side to side. The attacks did not last long, but left her head feeling badly. She had been deaf with the right ear five or six years.

An autopsy made in 1872 shows how a medico-legal value may be attached to lesions of the internal ear. A man was found in the street at night insensible; he was known to have taken liquor during the evening in company with others. A fracture of the skull with rupture of the middle meningeal artery was the cause of death. The temporal bone over the internal ear on both sides was much congested, and in the left internal ear were several drops of pus. This condition of the internal ear would justify the supposition that he had an attack of vertigo just as he had gone up the steps of his house, and that he had fallen and so fractured his skull.

RECENT PROGRESS IN OPHTHALMOLOGY.

BY O. F. WADSWORTH, M. D.

Decussation in the Chiasma.—The question of total or partial decussation of the optic nerves in the chiasma, of no inconsiderable clinical importance, can by no means be considered as definitely settled. The results of the anatomical investigations of Mandelstamm and Michel, which seemed to show total decussation, were given in this journal¹ a year ago, but they were not wholly convincing. Cohn² reports five cases of hemiopia, with measurement of the field of vision by the perimeter. One was of traumatic origin, and vision was finally recovered over the whole field; the other four followed apoplectic attacks, and were left-sided; three at least were stationary; the fourth was lost sight of. In none of these cases did the line dividing the blind from the still acting parts of the retina pass through the disc, and in none did it in both eyes pass directly through the point of fixation. The dividing line was never exactly vertical, though sometimes nearly so. In all cases there were greater or less defects in the peripheral parts of that half of the field which remained. Förster³ has given the perimetric measurement of a case of hemiopia in which the line of demarkation is not vertical in one eye, while there are peripheral defects in the sound half of the field in both. Bernhardt⁴ states that perimetric measurement in a case of aphasia showed evident right-sided hemiopia, but also the sensitive halves of the retinas were not wholly intact. Illing⁵ also reports a case, carefully measured, in which the line of division was not vertical, and there were peripheric limitations. Mauthner,⁶ however, found with the perimeter in a case of hemiopia an exactly vertical line of demarkation, and perfectly normal extent of the left half of the field for both eyes. The last case alone offers a typical example of semi-decussation as it has been assumed, and probably in many of the cases which have been reported as similar to it the shape and extent of the field of vision was not examined with sufficient accuracy. To explain the other cases referred to, something more than Wollaston's semi-decussation theory is apparently needed.

Scheel⁷ sought the course of the fibres in the chiasma of animals and man by examination of sections made in various directions, and convinced himself that there was total decussation. Experiments which he made

¹ Boston Medical and Surgical Journal, xc. 454.

² Monatsblatt für Augenheilkunde, 1874, page 203, Juin-Juli.

³ Annales d'Oculistique, tome lix., page 22, 1868.

⁴ Berliner klinische Wochenschrift, 32, 1872.

⁵ Wiener medicinische Zeitung, 23, 24, and 25, 1874.

⁶ Oesterreichische Zeitschrift für praktische Heilkunde, 1872.

⁷ Inaugural Dissertation, Rostock, 1874.

on rabbits and kittens, by enucleating one eye and endeavoring to trace the consequent atrophy backward along the nerve, failed or were imperfect on account of the short time which was allowed to elapse before the animals were killed; two of them, however, in kittens, seemed to point to total decussation.

The results arrived at by Gudden¹ were different. He formulates them as follows: 1. In all animals whose field of vision is separate for the two eyes there is crossing of all the fibres of the optic nerves. 2. In all animals (and hence in man) which have a common field of vision for the two eyes there is only partial crossing of the optic nerves.

Gudden points out the great difficulties that exist in the way of accurate solution of the question in the higher animals by means of sections, on account of the great fineness of the fibre-bundles; still, by careful comparison of successive sections, he found even in man some bundles which did not cross. Much more convincing, because easily capable of demonstration and demanding no elaborate preparation of the specimens, were the results of experiments in which one or both eyes of newly-born rabbits and dogs were enucleated, and the condition of the nerves and optic centres observed after the animals had reached maturity. These demonstrated the correctness of the principle stated above. When one eye of a rabbit has thus been removed there is found complete atrophy of the corresponding nerve and opposite tract; also atrophy of the opposite optic thalamus, corpus geniculatum externum, and of a bundle of fibres winding around the pedunculus cerebri, which Gudden has named tractus peduncularis transversus, and which appears to be dependent on the presence of the retina for its existence. In the dog, under similar conditions, both optic tracts, both optic thalami, corpora geniculata externa, and tractus pedunculares transversi are seen to be smaller than normal. The discrepancy is greater on the side opposite to the enucleated eye, but also on the same side these parts are very evidently below the normal standard. Again, in an adult dog whose optic nerve-centres on the right side had been destroyed by operation immediately after birth, although the right tractus opticus was wanting, both optic nerves were present, both smaller than normal, the left smaller than the right. From these results it would appear that in the dog the number of fibres which cross is greater than of those which remain on the same side.

On two points all recent observers are agreed; namely, that there is no anterior commissure, and that, although a posterior commissure exists, it has no physiological relation to the optic nerves.

Color of the Macula Lutea.—Led by the difference between the apparent color of the macula lutea as seen by the ophthalmoscope—a dark reddish-brown—and the yellow color generally ascribed to this

¹ Archiv für Ophthalmologie, xx. 2.

part of the retina, Schmidt¹ examined an eye immediately after enucleation from a living subject, another, with light-brown iris, four hours, and a third, with bluish-gray iris, one half-hour after death. In all the macula was of a dark reddish-brown color, just as it usually appears with the ophthalmoscope. In one of these cases the second eye of the same individual was removed and opened twenty-one hours after death, and the well-known straw-yellow color with darker centre, as usually described, was found. At the same time in the other eye, which had been opened early, the macula was still brown, though its margin had taken on a yellowish tint. Schmidt concludes that the yellow color is only due to a post-mortem change.

Coefficients of Refraction of the Ocular Media. — The measurements of the indices of refraction of the aqueous and vitreous humors made by Krause and Helmholtz have been generally accepted as correct. They gave to the vitreous a somewhat greater refractive power than to the aqueous. Fleischer² reinvestigated the subject, according to a more accurate method given by Abbé, and found, on the contrary, that the aqueous had the greater coefficient of refraction. As the material Fleischer used was not quite fresh (so far as human eyes were concerned), Hirschberg³ made another series of investigations by Abbé's method, with fluids obtained a shorter time after death. His results agreed very nearly with those obtained by Fleischer. He gives the index of refraction of the aqueous as 1.337, that of the vitreous as 1.336.

Woinow⁴ examined the refraction of the lenses of three freshly enucleated eyes, from a young child, a youth, and an adult. He found (1) the older the individual the greater the index of refraction of the lens; (2) the nucleus has the greatest index of refraction; (3) the difference between the indices of refraction of the different layers remains the same at different ages, and does not diminish with increasing age.

Action of Calomel on the Conjunctiva. — Kammerer⁵ had calomel dusted upon the conjunctiva of his own eye for a long time, and took the opportunity to decide the disputed question whether calomel used in this way acted only as a mechanical stimulant, or also by absorption (as bichloride). He collected his urine twice for the period of a week in a large flask, added hydrochloric acid in excess, and then allowed a piece of gold-leaf wrapped in tin-foil to hang by a platinum wire in the fluid for fourteen days. In neither of these two experiments could he discover a discoloration of the gold-leaf from amalgamation after drying,

¹ Centralblatt für die medicinischen Wissenschaften, No. 57, 1874.

² Inaugural Dissertation, Jena, 1872.

³ Centralblatt für die medicinischen Wissenschaften, No. 13, 1874. Archives of Ophthalmology and Otology, iv. 2.

Monatsblatt für Augenheilkunde, 1874, page 407.

⁵ Virchow's Archiv, lix. 467.

but on bringing it to a red heat in a narrow glass tube closed at one end a small amount of sublimate was obtained, in which minute globules of mercury could be seen with a magnifying glass. The sublimate was then carefully heated with iodine, and the product had the characteristic yellow color of iodide of silver. Two similar experiments with the urine of two patients on whose conjunctivæ calomel was dusted gave a like positive result; in one case the gold-leaf was also discolored. It must therefore be assumed that the calomel in contact with the fluids in the conjunctival sac is partly transformed into bichloride of mercury, as such is absorbed by the mucous membrane, and acts chemically on the fluids and tissues of the eye.

Pyramidal Cataract. — Poncet¹ had the opportunity to examine the eyes of a child affected with double congenital pyramidal cataract. He found that the cataract, a cone two millimetres in height and in diameter at the base, was inclosed by the anterior capsule, unchanged in transparency or thickness, but thrown into folds towards the summit. On the anterior surface of the capsule were scattered pigmented cells; these were more numerous on the cone, especially near the summit, but also were present beyond it. At the base and about it the cells were round, but toward the vertex they became large and branching. The substance inclosed in the cone was granular, traversed by striæ parallel to the curved surface of the lens, and inclosed here and there cavities in which were collections of cells. The base was well defined against the lens substance, and somewhat convex backward. Nowhere in the cone was there anything which reminded one of the capsular epithelium, or which resembled degenerated lens fibres. Up to the base the normal epithelium was in place beneath the capsule, but here it left the capsule and extended for a certain distance between the cataract and the lens substance. There was no attachment of the cataract to iris or cornea; the iris presented no appreciable lesion, and the cornea showed no sign of rupture or ulceration; the membrane of Descemet was intact, and its epithelium regular, but there were little groups of pigmented cells lying against it. Near the edge of the cornea these pigmented cells were more abundant, and in certain parts there appeared a purulent collection in the meshes of the ligamentum pectinatum. From these appearances Poncet believes the theory of Hulke and others, that subcapsular pyramidal cataract is due to proliferation of intra-capsular cells, which push forward the anterior capsule and afterward degenerate, is incorrect. There occurs rather, in consequence of an inflammation in earliest infancy, an adhesion of a small part of the anterior capsule to the cornea, and when, in the course of the development of the eye, the anterior chamber deepens and the lens is pushed back, the capsule is drawn out in the form of a cone before its adhesion to the cornea is ruptured.

¹ Archives de Physiologie, No. 6, 1874.

As the cone is thus formed, the epithelium separates from the capsule, and the cone is filled by an exudation and perhaps the remains of some lens fibres which have been drawn forward with the capsule.

This view would agree well with that of Horner¹ regarding the development of "inflammatory capsular opacity," i. e., subcapsular opacity following inflammation of the iris and neighboring tissues. Behind the fibrous-looking layer with interspaces containing cells, which lies beneath the capsule in such cataracts, Horner found an apparently unbroken single layer of regular cells, continuous at the edge of the opacity with the normal epithelium of the capsule. He therefore is disposed to consider the newly-formed layer as the product of the passage of fluid and cells through the capsule from without, instead of, as in the general acceptance, arising from proliferation and degeneration of intra-capsular cells.

Treatment of Amblyopia by Santonine. — Schoen,² believing that the action of santonine is to increase the excitability of all those fibres of the retina sensitive to color, regards its employment as indicated in diseases which diminish the excitability of the retina, atrophy, and particularly amblyopia due to alcohol and tobacco or anæmia. He has used it in a number of cases, and with better effect than he has seen from strychnia or other treatment. Two cases he relates briefly. Both patients were smokers, both improved rapidly under treatment. The dose was 0.3 gramme daily.

Schenkl,³ on the other hand, in a notice of Schoen's monograph, states that santonine was employed in Hasner's clinic in twenty cases of disease of the opticus amenable to treatment, without any success in a single case.

(To be concluded.)

KÜSS'S LECTURES ON PHYSIOLOGY.⁴

AFTER a somewhat careful reading of this book, we do not hesitate to call it, on the whole, the best treatise on physiology, of its size, now to be found in English. There are larger ones, fuller at all points, like Carpenter, Flint, and Marshall; fuller on some points but less complete on the whole, like Dalton, and Draper; there are smaller ones, like Huxley, and Cleland; and there are the treatises of Kirkes and of Bennett, which are of about equal length with that of Küss. But Küss, although by no means free from what may be called crotchets, gives nevertheless a more equitable picture of the science than Ben-

¹ Monatsblatt für Augenheilkunde, 1874, page 462.

² Die Lehre vom Gesichtsfelde, 1874.

³ Vierteljahrschrift für die practische Heilkunde, i. 1875.

⁴ A Course of Lectures on Physiology. By Professor Küss, of Strasbourg. Edited by MATHIAS DUVAL, M. D. Translated from the Second and Revised Edition by ROBERT AMORY, M. D. With 150 Wood-Cuts. Boston: James Campbell. 1875.

nett, whose mind is devoted to peculiar theories and hobbies; whilst over Kirkes, Küss has the advantage that every investigator has over a compiler, of looking at the subject everywhere with his own eyes, and describing things in a much more vivid and interesting way. Kirkes's exposition, though clear and judicious, is fearfully pale and commonplace, while Küss's style, especially in the original French, is full of vivacity and elegance, and abounds in picturesque epithets and bits of description, which serve both to fix the reader's attention and to impress his memory. There is nothing new in the plan of the book but a good many opinions in regard to details are new; many, we fear, more new than true, at least more new than certain. The author appears to have discovered simultaneously with Virchow the deep-reaching importance in physiology and pathology of the cell-doctrine; and the most marked characteristic of the book is perhaps the constant stress laid upon the epithelial globules, under which term the author would include the gland-cells, since they have the same embryonic source. He conceives of many processes as vital which are usually ranged under the physico-chemical head; all phenomena of absorption and non-absorption, for example. The epithelium of the stomach is almost entirely non-absorbent; so is that of the bladder. But in the intestine, absorption occurs by the intermediation of the epithelial cells, which, bathed in the chyle, grow at its expense, and then, voiding the contents which they have elaborated from it by an ill-understood process into the vessels of the villi, they fall into decay themselves, and are replaced by a new crop. The use of the bile is "to sweep the workshop clean in which the laborious task of absorption has just been completed." There is, as every one can see, much in all this that lacks direct verification, but it is all hypothesis of a good sort, suggestive and likely to be fruitful of new observations. The same cannot be said of Küss's adoption of Parchappe's theory of the valves of the heart, nor of his theory of the intercostal muscles, which is no doubt partly, but only partly, true. He says their sole use is to keep the intercostal spaces smooth and tense during the fluctuations of internal and external pressure that occur. When they are lamed, as sometimes in pleurisy, we find the lung grooved transversely by the bulging inwards of the space. No doubt they have this office, and it is his merit to have called attention to it, but direct observation shows that during ordinary breathing no other muscles act to raise the ribs; and the contraction then observed of the visible intercostals during inspiration does do this, while it also, as Küss says, must resist the in-sucking tug of the diaphragm.

The chapters on the urinary system and on the genital system are among the best in the book. The author thinks that the secretion of urine is composed of two distinct phases: first, simple filtration in the glomerulus; second, return by the epithelium of the convoluted tubes of certain useful parts of the filtrate, for example, albumen, into the blood. There is no proper sphincter of the bladder. The embryologic chapter is poor and short.

On the whole, Dr. Amory has performed his rather thankless office well. We have noticed a few slips in the former half of the book which we hope a second edition will cancel. We recommend the book especially to medical students, although we cannot help expressing the wish that some one may

translate for their benefit Fick's wonderful little *Compendium der Physiologie*, which is just the book to use in connection with lectures. They give the experimental details, while Fick gives in a beautifully clear form, and without superficiality, all the well-founded results and laws.

THE BOSTON LYING-IN HOSPITAL.

Two years ago the trustees of the Boston Lying-In Hospital decided that the time had come to re-open the hospital, which had for so many years been closed. Accordingly, a suitable building was purchased in McLean Street, and the present hospital was opened January 1, 1873. The first printed report since the re-opening of the hospital has just been published.¹ From it we learn that during the past two years three hundred and forty-two women have received treatment within its walls, and that only three of the patients have died from any cause which could be in any way associated with the hospital.

The average cost of each patient to the hospital has been about thirty dollars. The average stay of each patient in the hospital has been about twenty-three days, and the average number of patients in the hospital at a time has been about eleven. The funds of the institution are sufficient to carry on the hospital at its present capacity of only eighteen beds. Owing to the limited accommodations the physicians have been frequently obliged to refuse urgent cases. The trustees close their valuable report with an earnest appeal for donations by which the advantages of the hospital may be at once extended to at least double its present capacity. The visiting physicians, in their report, which accompanies that of the trustees, state that applications for admission are received almost every day from women who are utterly destitute of money and friends, and who beg to be allowed to come and work for their board till the time of their confinement. Most of these cases have to be refused simply because there is no room. As one of the benefits of its organization, the hospital has been able to supply a large number of wet nurses. We trust that this excellent charity will receive the increasing favor which it richly deserves.

FOWLER ON THE URINE.²

WE have here a little book of seventy-two pages, which is divided into six parts, as follows: Part I. treats of the characters of normal urine, in fifteen pages; Part II. of the characters of abnormal urine, in five pages; Part III. of urinary deposits, in thirty-one pages; Part IV. of albumen, sugar, and bile, in eight pages; Part V. of the quantitative estimation of sugar and urea, in seven pages; Part VI. of gravel and calculi, in six pages.

¹ *Forty-Second Annual Report of the Boston Lying-In Hospital*, January 1, 1875.

² *Examination of the Urine*. By GEORGE B. FOWLER. New York: D. Appleton & Co. 1874.

From the amount of space devoted to some of the above subjects, it will be seen at once that their treatment must necessarily be very incomplete. Nothing can be worse for a beginner than to have such an incomplete guide to the examination of urine placed in his hands, since he is left entirely in the dark upon many important points, and is misled in regard to others. The book is chiefly chemical and microscopical, but even the ordinary methods for determining an increase or diminution of the normal constituents are not given, nor the precautions which are necessary in performing some of the important tests. For example, the necessity of removing albumen in testing for urea by nitric acid is not alluded to, nor the danger of mistaking a zone of acid urates for one of albumen in performing the nitric acid test for the latter.

In the preface the author states, "In teaching the subject I have become convinced that a few words regarding the conditions which produce the various changes in the urine, normal and abnormal, have very greatly assisted the student in mastering the subject, by at once revealing its practical import. I have, therefore, introduced here brief outlines of the physiological and pathological influences which bear upon the subject." A fair example of these "brief outlines" is the following, which is *the whole* of the physiology and pathology of urea which the book contains: "Urea represents the worn-out nitrogenous elements of the body. It is excreted at the rate of about five hundred grains per day. If, through any derangement of the functions of the kidneys, urea is not thrown off by the urine, it accumulates in the circulation, and acts as a poison upon the nervous system, inducing what is called uræmia."

E. S. W.

THE STATE BOARD OF HEALTH.

LIKE its predecessors, the Sixth Annual Report of the State Board of Health embodies the results of much excellent work. Few can have taken it up without a sigh for our loss by the death of the former secretary, but we are cheered by many evidences that Dr. Derby's work will live long after him, and that the board will maintain its high reputation.

One of the most striking papers is that by Dr. Henry I. Bowditch, on Inebriate Asylums and Hospitals. It is refreshing, after the heat of fanatical discussion, to find the temperance question treated temperately, and those who differed from Dr. Bowditch concerning prohibition have here abundant proof that he is not blind to the evils of excess nor disposed to leniency in its punishment. He recommends that the drunkard be deprived of his civil rights for a longer or shorter time, according to the number of his offenses, and also that the State establish inebriate asylums for purposes of reform. There is little to criticise except the practicability of the suggestion. We imagine that in many cases it would be very difficult to establish the fact of drunkenness and that its definition would be as difficult as that of insanity. Some witnesses would vouch for the defendant's sobriety as long as he had not actually tried to light his pipe at the pump, while others would be inclined to look on any accidental excitement as a sign of intoxication. Dr. Bowditch's idea of what

an asylum and its superintendent should be is simply admirable, but we fear that such perfection can hardly be obtained till human progress has been so great that the asylum would be unnecessary.

There are three papers bearing on the question of meat. One by J. C. Hoadley, Esq., discussing the transportation of animals by rail, one by Dr. Folsom, on the effect of disease of the animal on the health of the consumer, and a third on the condition of the Brighton abattoir. We are glad to learn that, though there is still room for improvement, great reforms have been made in the manner of transporting animals from the West. Though truly scientific sources of knowledge are scanty, there can be no reasonable doubt that the flesh of an animal killed in good condition must be more healthy than that of one exhausted or greatly terrified. We do not know that any marked harm comes from eating the bodies of animals that are not absolutely sound, but it is best to be on the safe side. Dr. Folsom states the case very judiciously: "The antiseptic effect of good cooking, and the great power of the system to select and assimilate what it requires and to reject what is superfluous or injurious, probably in most cases protect active, vigorous persons from the harmful effects of eating unwholesome meat. But for the weak and the sick, and for all who live under the complicated circumstances of a highly civilized life, demanding of their brains and muscles all the work that can be got out of them, it is manifestly of the greatest importance to have all the conditions of living as perfect as possible, and to admit no source of even possible injury into their systems. Nor should we be deceived by the seeming tolerance of evil influences which our organs manifest by long habit." Dr. Folsom recommends rigid inspection, and we hope his advice will be heeded. The reports on the Brighton abattoir give the impression that, great as its success has been, it is not yet in perfect working order, and requires strict supervision.

We hope to discuss, on a future occasion, some of the other papers published in this report.

BOSTON COMMON.

THE bill intended for the preservation of the Boston Common has received the signature of the governor, and has now become a law. The act is general in its character, and provides that no street, canal, railroad, or street railway shall be laid out or constructed over any public common or park which has been appropriated to public use uninterruptedly for twenty years or more, and that no part of such common or park shall be taken for widening or altering any street previously constructed, without public notice and the consent of the inhabitants of the city or town in which the same are located. The notice must set forth specifically what portion of the common or park is proposed to be taken, and it must give thirty days at least before the taking can be accomplished. The consent of the inhabitants, however, shall be presumed to be granted unless within thirty days of the publication of the notice as many as ten legal voters of the city or town request a vote of the inhabitants. A vote

must then be taken by ballot at a meeting duly called by the mayor and aldermen of a city or selectmen of a town, and a majority of the voters present and voting shall be necessary for the expression of such consent. The act also provides that no lands of any public institution belonging to the commonwealth shall be taken for street or railway purposes, without leave of the legislature.

This legislation will, therefore, prevent in the future any such hasty action on the part of the city government, as has been attempted, and as has nearly succeeded, more than once during the past half-dozen years, for the purpose of taking a strip from the Boston Common. It is quite certain that there will be found at least ten men in the city on the alert to give an alarm to the citizens in case another invasion should be attempted.

AN INTERESTING INQUEST.

A CASE has recently occurred in this vicinity which illustrates so well the value and importance of a thorough autopsy that we call special attention to it. The facts are briefly as follows: A train on the Old Colony Railroad came late in the evening upon the body of a woman lying upon the track; there was not time to stop the train before the body was struck, and in consequence the woman's arms were torn from the trunk and the walls of the chest were thoroughly crushed, the wheels having apparently passed directly across the thorax. The train was immediately stopped and the police were presently on the spot. On examination, it was found that there was no life in the body and that its surface was cold. The occurrence became the subject of inquiry by a coroner's jury the next day. In the course of the inquest, it came out that the woman had been visiting, early in the evening or in the afternoon of the day of the railroad accident, at the house of her sister-in-law; that her brother-in-law was present at the time; that loud words passed between all the parties; that the deceased was urged to drink but apparently refused; and that the exclamation, "Don't choke me, Johnny," was heard, as if addressed by the deceased to her brother-in-law. This testimony introduced new elements into the inquest. It was impossible to rest satisfied with the apparent cause of death and to render a verdict that death was caused by the railroad accident for which the company was not to blame (such being the usual form); the question arose whether the woman was already dead when the body was struck by the engine, and whether in that case the death was the result of physical violence or of poison.

The decision of these important points rested mainly on the skill and thoroughness with which the post-mortem examination was conducted. The duty of making the autopsy fell to Dr. O. F. Rogers, of Dorchester; he was assisted by Dr. Gilbert. It is evident that the duty was not shirked, and that great credit is due to Dr. Rogers for his minute and painstaking search for anatomical evidence in this case. We cannot quote the entire report of the physicians, but we present such extracts as bear on the interesting question of the immediate cause of death:—

"Over the right malar bone there was a lacerated wound one inch in length. A similar wound extended across the nose, which was crushed and forced to the left. Beneath the left eye there was another laceration, about one inch in length. These wounds were surrounded by bluish-red discolorations, which when incised showed very slight extravasations. The skin of the face in the immediate neighborhood of the wounds was slightly stained with blood. Upon the anterior and lateral portions of the neck were several irregularly shaped yellowish-red marks, which upon being incised disclosed no extravasations. There was an irregular opening about four inches in diameter with ragged and thinned edges, located in the skin of the chest about four inches below the middle of the right clavicle. About this opening there were several dark reddish patches. The right arm was torn from the shoulder and hung by a few shreds of skin. The left arm was entirely separated from the body about four inches below the shoulder. There were patches of ecchymosis in the substance of the scalp over the posterior portion of the occipital bone and also over the left temporal bone. The vessels of the scalp were congested. The vessels of the dura mater and pia mater were exceedingly congested. The cerebral sinuses were full of dark semi-fluid blood. All the vessels of the brain were engorged with blood. There was no fracture of the base of the skull. The superior maxillary, malar, and nasal bones were fractured and displaced backward and to the left. The lower jaw was fractured. In the connective tissue anterior to the fourth and fifth cervical vertebrae, between the cornua of the hyoid bone, and also posterior to the larynx, were decided clots of blood. The lining membrane of the trachea was of a bright red color and intensely congested. Anterior to the body of the cricoid cartilage, commencing at the lower border of the vocal cords, there was a marked ecchymosis. The spinal column, from the seventh cervical to the first lumbar vertebra, and the walls of the chest were crushed. The thoracic viscera were ground to fragments. Small portions of the lung only could be identified; these portions were of an evenly diffused dark purple color, and excessively congested. The vessels of the mesenteries were full of dark blood. The vena cava ascendens was also distended with blood. All the other organs were examined and found to be in a healthy condition."

In the opinion of the physicians death was caused by asphyxia, resulting from strangulation, produced at some period anterior to the passage of the railway train over the body.

We have commented somewhat at length on this case because of its intrinsic interest in a medico-legal way, and also because of the creditable manner in which the medical examination of the case was conducted. Autopsies are too frequently done in a slipshod and imperfect way, and the generalizations therefrom are often too hasty; so that we are glad to call attention to what we deem in many respects an exceptional case. We think our readers will agree that the conclusion arrived at as to the cause of death is substantiated by the anatomical appearances found, although the elimination of these from the lesions due to the railroad injury was a matter of some delicacy and tact.

LOUISE LATEAU.

THE case of Louise Lateau, the mystic of Bois D'Haine, about whom from time to time remarkable accounts have been given, has been the subject of investigation by a commission, who reported to the Royal Academy of Belgium through M. Warlomont. The report as given in the *London Medical Record* of March 3, 1875, states that Louise Lateau, who was born in Belgium in 1850, passed through much sickness in childhood. Her menses first appeared in 1868, and in the same year the ecstasies and the stigmata, which have so strongly attracted public attention, both by their symptoms and by their periodical return on the Friday of each week, began to display themselves. Moreover, at the time of the investigation the girl was asserted not to have taken any food since March 30, 1871, and she herself stated that she had not had any action of the bowels for three years and a half. She declared that she was constantly in pain all over her body, but that these pains were specially concentrated in the regions where the stigmata appeared, the backs and palms of the feet and hands, the left side, and the right shoulder; and that they became particularly intense on Fridays. The epigastric and dorsal pains peculiar to hysterical subjects were entirely absent. She said that since she had ceased to eat and drink, she no longer passed urine. Every Friday special scenes took place, which were in preparation on Thursday. On that day Louise was going about but suffering from headache, hot and dry skin, full and quick pulse; in a word, all the signs of violent *molimen hæmorrhagicum* were present to a large extent. On Fridays, blood flowed from different parts of her body. M. Warlomont observed on his first visit that the upper part of the forehead was covered with dried blood, which, it appeared, had flowed from midnight until six o'clock in the morning, but had then stopped. In the backs and palms of both hands were two bleeding wounds, from three quarters of an inch to one inch long. Red blood, like the blood of the capillaries, flowed incessantly drop by drop, and almost continuously, from these four wounds. The wounds of the two feet resembled those of the hands, but were of smaller extent. The bleeding on the left side followed the level of the space separating the fifth from the sixth rib, outside and a little below the centre of the left breast. During the greater part of the day-time of Friday, Louise remains in a state of more or less profound ecstasy. The commission reported that the genuineness of the ecstasies was incontestable. As to the stigmata, the spontaneity of whose production was strongly questioned, the commissioners not being able to arrive at the primary cause, whether mechanical or spontaneous, it was necessary for them to confine themselves to making certain of the manner, whether spontaneous or artificial, by which the hæmorrhages are produced. On the evening before the crisis one of the hands was inclosed in a glass globe so secured that the member could not be tampered with. The next morning the apparatus was perfectly intact, as the commissioners assured themselves by the most careful examination of the outer envelopes and the seals which they had affixed, not one of which bore the slightest trace of having been disturbed. The sloping portion of the receiver was filled with a small pool of liquid blood, the back and palm of the hand were covered with clots of blood firmly adher-

ing to the palms. It therefore appeared that the effusions of blood did really occur spontaneously, and without the intervention of any violent means from without.

In discussing the pathology of the ecstasies the report classes them among the neuroses, and states that a marked characteristic of one of the principal groups of these diseases is the faculty in virtue of which the patient under its influence momentarily quits his physiological condition, to enter into a secondary state, during which his acts, functions, and ideas differ essentially from what they are in the normal state. In fact, life is duplicated. The stigmata are also explained by the influence of the mind on the body, their formation being accounted for as follows: the mental act evolving pain by a determinate cerebral action; congestion created by that pain, urged on by external excitations; consecutive loss of elasticity in the capillaries of the congested parts; stasis of the blood in the capillaries; dilatation of these vessels; angioma. M. Warlomont refers the cause of these phenomena to a disturbance of the principal vaso-motor centre, situated in a space comprised within the limits of one millimetre behind the quadrigeminal tubercles and from four to five millimetres in front of the lower extremity of the calamus.

Regarding the abstinence from food, it is stated that it is contrary to the laws of physiology, and consequently there is no need to prove that it is a fabrication.

SUCCUSSION IN A CASE OF OVARIAN CYST.

At a recent meeting of the Academy of Medicine, M. Laboulbène reported a case such as he had never before observed. It was that of an ovarian cyst which presented the phenomenon of succussion. The tumor, showing all the signs of a cyst of the ovary, probably unilocular, had attained the size of an adult head, and was following the ordinary course of such tumors, when it suddenly developed inflammatory symptoms, namely, heat, redness, and thinning of the skin, so as to seem about to discharge itself spontaneously. It was then that M. Laboulbène discovered in the tumor the phenomenon of succussion. After having satisfied himself that any fluid which was present in the cyst did not proceed from the intestinal canal or the bladder, and that therefore there did not exist any communication of the cyst with the neighboring hollow viscera, he asked what could be the cause of the formation of gas in a completely closed cavity. M. Depaul remarked that in a case of this sort, although the fluid contents of the cyst were not discharged by the rectum or the urethra, there was no reason why the morbid sac should not give access to gases by a crevice or fissure so situated as to permit the gases to enter, but to oppose their escape. In support of his statement he cited a case of extra-uterine abdominal pregnancy in which, while the enveloping sac did not permit any portion of the fluid which it contained to escape, before the operation, by the natural outlets of the body, yet at the examination which was made after gastrotomy, a fissure was discovered at the dependent part of the sac which could give entrance to gases.

But is it necessary, asks *L'Union Médicale*, for the explanation of the

development of putridity and the formation of gas in the ovarian cyst reported by M. Laboulbène, to consider essential a communication between the cyst and the neighboring hollow viscera? Inflammation of ovarian cyst without exterior communication is by no means an extraordinary occurrence, nor a very rare one; and one can conceive of a purulent cyst situated in the neighborhood of the intestine easily undergoing putrefaction, as happens so often to purulent collections which form in that region, and as is occasionally observed in subcutaneous collections of a similar nature, which form in the limbs.

MEDICAL NOTES.

— The coming week will begin with our second Hospital Sunday. It is to be regretted that our suggestion of a year ago to place the money for distribution in the hands of a committee of the Suffolk District Branch of the Massachusetts Medical Society has not yet been accepted. This step would put the movement on a much surer footing, and probably make this excellent charity a certain success.

— A case is reported in the *Medical Times and Gazette*, by Dr. Joseph Coats, of Glasgow, which is of interest in relation to the localization of the function of language. At the Glasgow Royal Infirmary in October last was a boy in whom after death there was discovered one lesion, among others, specially related to the inferior left frontal convolution at its posterior extremity. This was a pretty large collection of pus, measuring three inches and a quarter in diameter and occupying the membranes of the base just at the fissure of Sylvius. The abscess did not appear to involve the brain substance directly, but, situated at the anterior extremity of the left fissure of Sylvius, it partially opened up the fissure, crowding the convolutions of the frontal lobe forward, and those of the temporal lobe to a less extent backward. There was in addition considerable acute meningitis, and a small abscess in the substance of the brain in the right temporal lobe. The primary affection was caries of the right temporal bone. During life the boy complained of great pain in the head, and seemed in a stupid state; could hardly tell his name, and was disinclined to answer questions; but for three days before his death he was exceedingly restless, roaring, shouting, screaming, and using the most filthy and obscene language. These latter symptoms are suggestive of an acute irritation of the organ of language, the boy indulging in that style of speech to which he had once been accustomed; and the lesion described is just such as would produce a surface irritation of Broca's convolution, and of that part of it which is supposed to be specially the seat of the organ of speech — namely, the posterior portion of the inferior frontal convolution.

— A subject which has called forth general, and it seems to us well-merited condemnation from the profession in England, is that of the inquest on the late Sir Charles Lyell. For several months Sir Charles had been suffering from vertigo and other symptoms characteristic of cerebral degeneration, and had been under the care of his medical attendant since the autumn. On the 9th of last December he stumbled and fell down several stairs, incurring a

bruise on the forehead and some injury to his thumb in consequence. To all appearance he seemed in about a fortnight to have entirely recovered. After Christmas he became worse, vertigo increased, the brain got duller, he became semi-conscious, and died the last of February, some twelve weeks after the accident. Notwithstanding the fact that his long sickness and the characteristic symptoms seemed to make plain enough the cause of Sir Charles's death, and in spite of the statement from his physician, a very competent practitioner, that an inquest was unnecessary if not unjustifiable, the coroner, Dr. Hardwicke, insisted upon holding the inquest, although the body had been inclosed in a lead and oak coffin. So much indignation was aroused by the procedure of Dr. Hardwicke that the subject was brought before the House of Commons, and the Home Secretary was called upon to give what information he possessed regarding the case. It seems to be the general opinion that the coroner was legally right in holding the inquest, on the ground that death occurred within a year and a day of the injury; but although technically in the right, his procedure was regarded as unnecessary and ill-advised.

— Dr. Melvin Rhorer reports to the *American Practitioner* for March, 1875, a case of worms in the urinary bladder. Dr. Rhorer was called to a farmer sixty-four years of age, supposed to have stone in the bladder. For twelve months the patient had been affected with occasional interruptions to the flow of urine, which for the last three weeks had increased in severity, causing great pain in evacuating the bladder. For forty-eight hours but little urine had been passed. On the introduction of a catheter and evacuating the bladder, there were found in the vessel forty or fifty small red worms about half an inch in length, having a number of legs arranged in two distinct rows from one extremity to the other, and their bodies being encircled with numberless small cartilaginous rings. Two hours later the patient voided with his urine about half a dozen more worms, and for the next ten days from four to six worms daily, since which time the discharge of worms has ceased.

LETTER FROM ROME.

MESSRS. EDITORS, — The abstract truth of the saying that "when in Rome one must do as the Romans do" has often nimbly commended itself to the world, but by an odd contradiction nowhere has it so little practical value as in the city of its presumed birth. Hardly has the stranger entered it before he perceives that, so far as he is concerned, the Roman style of life must be qualified in many particulars; that he cannot, in fact, do as the Romans do without the loss of his usual vitality, or even the risk of jeopardizing his very existence. Rome still dwells apart from the rest of the world, in that seclusion which has ever been hers. The past ages of her eventful history have bequeathed a thousand peculiarities which have gradually become as many necessities. The natural outgrowth of these is a mode of life belonging only to her people, the result of a slow and instinctive adaptation of themselves to their unique surroundings. Their present customs are those of many generations past, and they still cling to that antiquity with which they have been so richly endowed that latent pride, no less than habit, renders them loath to

abandon it. The evidence of this is forcibly presented to every observer, and the more so from their poverty, which is so often the peculiar inheritance of those who dwell chiefly in the past. And now such is their condition that not even the pressure of self-interest will induce them to provide an abundant or wholesome table for themselves or others. Their houses are cold and damp, and so are their churches and palaces, which seem the natural offspring of age and ruin, and already far on their way to join their predecessors, whose remains strew the earth around them. Their floors are of stone, and the small means which at first prevented the use of carpets have now constrained them to assert their unhealthiness.

Ages of unmitigated cold during the winter months have enabled the Romans to bear it with impunity, and yawning doors and ill-fitting windows cause little sense of discomfort or imperfection. Narrow streets with walls towering to the clouds shut out the sun and condense the wandering air into impetuous gales, but the thinly-clad citizens issue from their fireless rooms and feel nowise annoyed. Bareheaded and with no outside garments, they will endure the severest temperature for hours. They never shiver, although their fingers and noses may be blue; only the shrewd beggar does this, and he professionally. Dirt strikes them with no aversion. It is consanguineous, and few would appreciate the pith of its definition as "merely a thing in the wrong place." In it they serenely vegetate, while lively odors play around them, with a gay philosophy born of the "*habitude de malheur*," and are proof against all irritation, mental or corporeal. Refuse out of sight is out of mind, and over-fastidious souls alone ever trouble themselves about the sweltering garbage which in many localities fills the broken drains and spoils the air. Let none, however, imagine that the prevalence of these little incongruities, as we must regard them from the heights of our superior civilization, is due to sanitary indifference. The health of the Romans, and that of their Italian brethren in general, is, to say the truth, inestimably dear to them, and no people are more seriously alarmed at the slightest hint of approaching illness. Had these flaws in their social system ever been the obvious source of any personal detriment, the Romans would have taken infinite pains to discover and apply a remedy; but what argument against them would be available when it is seen that the healthiest quarters of the city are the poorest and the most densely-peopled, where time has solidified masses of squalor and filth into strata of unknown depth? Into these even the cholera never penetrates, and there fever seldom or never rages. The fact appears to be that the Romans have become hardened in the lapse of time to many things which we consider not only unpleasant but dangerous, and have contrived to flourish in spite of them. This is borne out by the statistics, which show that the impressions of the world in general are erroneous, and that Rome is by no means so unhealthy as has been imagined. The annual death-rate of 34 per 1000 is less than that of Florence, Genoa, Venice, Milan, or Naples.

But innocent as are these phases of Roman life to the children of the soil, it will not do for the stranger to presume upon their harmlessness to himself. To their effects the Roman alone can afford to be indifferent. His visitors must not attempt to dwell in the Ghetto, or any other foul and ill-conditioned

district; nor must they experiment on scanty and unsubstantial food; they must not face the wind and the cold in thin garments; they must not frequent houses which are pervaded by reeking odors that take every form of nasal aggravation. Prudence in these respects is both possible and necessary, and the customary results will follow from a generous diet, warm clothing, and pure air; for all these *are* attainable to those who exact them in spite of the native idiosyncrasies.

It often happens that travelers throw prudence to the winds, and under momentary excitement are guilty of indiscretions which at home even the most reckless would scarcely commit. Though these are comparatively seldom followed by the results which might well be expected, yet punishment is frequent enough to lead to serious suffering, which is oftener future than immediate. Unfortunately, in Rome one is much more exposed to dangerous temptations than elsewhere, and in no city do foreigners show so little power of resistance. Its manifold attractions are the more alluring from the variety of their contrasts; and these have the unusual merit of fascinating even the devotees of society, whose very weakness increases their dangers by diminishing their self-control. The more sensuous and impressible the temperament the greater the risk. To many there is a piquant delight in passing, on a bright night, from the ball-room to the Coliseum, to dance in a certain grim revelry over the bones of the Martyrs; in leaving the closing hours and hot mirth of a dinner party for an excursion to the chilly vault of the Pantheon, that they may see the full moon through the blue nucleus of its dome; in stepping from the sunny hilarity of the street into the darkness and dampness of a church or catacomb; in exchanging the sunset view from the tower of the Capitol for some deep excavation where they are bringing to the surface the decay of ages, and slowly spreading out its malaria for absorption. Illustrations like these might be multiplied by the score if there were time and space for the purpose. These will, however, suffice to prove that the ill-repute from which Rome is now suffering has many other sources than its climate. Every one will surely admit that a similar want of care and judgment elsewhere would be quite as pernicious as it sometimes is in these cases. In Rome the effects are in many instances more deplorable than they would otherwise be, from the fact that one is often tempted to exertions more exhausting than he suspects at the time, under the influence of an exciting atmosphere, the objects of interest around him, and the seductions of cheerful and inspiring company. In this way the tone of the system is unwittingly lowered, and diseases find easy entrance which would otherwise be shaken off; but there not unfrequently comes a depressing fear, especially to those who are naturally timid, who recall with a morbid avidity the unscrupulous inventions of the hotel-keepers in the rival cities of Florence, Nice, Munich, Naples, and other places. These thrifty purveyors for the foreign element have learned by long experience to fill their purses in a way that does more credit to the credulity of their patrons than to their own honesty. In this way sad effects have been produced on confiding tourists, for fear often drives home the fatal dart which death only shakes with fitful hesitation.

While on this subject it may be as well to remark that the exertions of which

weak women, invalid men, and dilapidated people in general are capable, when on their travels, are astounding, and would hardly be believed by the performers themselves if they had not actually made them. At Rome, as might naturally be inferred from the endless enticements on every hand, these gymnastics culminate. Ladies who at home can hardly walk an hour without fatigue; aged men who toddle round their gardens of a warm morning with a cane; mothers reduced by family cares to domestic incompetency and peevishness; fathers worn out by hard work, professional or other, till ordered abroad for rest by the family physician; sensitive spinsters, prone to adorn the fireside and make great capital of little ailments: all these and more go whirling round in a wild dance of excitement, oblivious of health, comfort, prudence, or anything else, in truth, but the fascinations of the moment. In their own countries doubts would be expressed as to their sanity; in Rome they merely follow the example of every one else. Of course, in numerous cases the results are alarming; yet to those who from a long sojourn in foreign countries have acquired the calmness to look on unmoved, they appear far less disastrous than might have been supposed. Still there are instances where the victims take to their beds and die, *pour encourager les autres*, doubtless availing themselves of the little breath left in them to charge it all to the deadly climate of Rome.

But despite this dark cloud of prognostics, let no one conjure up a visionary dread of the unbounded charms of that great city towards which we all wander even in our dreams. Of all these imprudences, dissipations, and weaknesses the effects are small indeed, as any one will admit who places a just estimate upon their strength for evil. Few superficial observers would believe how slight is the number of Americans — and these are, I regret to say, by far the most reckless and foolhardy of all the visitors to Rome — who have died here, and how much more scanty still the roll of those who have fallen victims to the much dreaded fevers. The sum total of deaths of travelers from the United States within the last six years amounts to but thirty-five. In the season of the Council, extending from the 1st of October, 1869, to the 1st of June, 1870, when there must have been at least fourteen thousand Americans in Rome — more than during any one season before or since — and when the deleterious influences were in every way multiplied, only nine died here. Of these, six were from fever, and all typhoid. In no season, before or since, have the deaths been so numerous, though few would consider this a high rate of mortality when everything is taken into account. During the past five months, which have been unusually aggravating and disagreeable from the quantities of snow and rain and the long-continued cold, beginning with the first of October, but four Americans have deceased in Rome, one from fever, and from heart-disease, consumption, and malignant carbuncle one each. In the six years just past the deaths from fever have amounted to fifteen, and these were all but one typhoid, which is that called by most persons Roman fever. The great majority of these fevers were caused by excessive fatigue, arising from over-exertion in sight-seeing or from devotion to the pleasures of society. At least three fourths of the sufferers had returned shortly before their illness from Naples, and probably brought from that city the seeds of their disease, of which they had too long neglected the first symptoms.

The fact that ardent sight-seers often make an effort to support the unusual strain upon the system by the use of stimulants is also a predisposing cause of typhoid fever. There is the greater enticement to this by reason of insufficient nourishment, especially to those who at home are accustomed to a generous and nutritious diet.

The more immediate origin of typhoid fever is commonly bad drainage in particular hotels, or houses, acting on systems reduced, by whatever cause, below their normal tone, and thus less able to resist its influence. This is an evil by no means peculiar to Rome, as has lately been most sadly illustrated at Oxford and other fever-stricken localities in England.

The majority of travelers in Italy know little or nothing concerning the characteristic diseases of the country, and especially those of Rome, though on this subject, as on every other of popular interest, there is much exaggeration and delusion. The Roman fever *par excellence* arises from the decomposition of vegetable matter, that from animal decay being quite different in its symptoms and effects. It invariably takes the shape of chills and fever, and strongly resembles our ordinary fever and ague. At times it assumes an aggravated type, is very dangerous, and then is called "*perniciosa*." This is fatal in about one third of the cases. It bears a striking similarity to the congestive chills and fever of some of our Western States. Of this there has been, during the past six years, but one death of an American in Rome. The circumstances showed mortal folly, as the patient, when not twenty-four hours out of his bed from an attack of chills and fever, ate a watermelon and then took a bath in the Tiber in the hot sun of August. Typhoid fever, all reports to the contrary notwithstanding, is in the far greater number of instances considerably lighter than under similar conditions in other countries. In addition to typhoid may be mentioned gastric fever, which is by no means common; it frequently passes slowly into typhoid. Rheumatic and neuralgic fevers are less rare than gastric, though seldom dangerous.

That the Roman climate is entitled to be termed perfect is not for a moment to be asserted, but it has a claim to protection from the innumerable slanders which interested parties have heaped upon it. Ordinary, perhaps extraordinary, care is necessary on the part of every visitor. To many the air is relaxing, and the body loses its tone, as it were. Rheumatism and neuralgia are apt to present themselves on a slight pretext, and are loath to depart. Colds and other slight complaints are acquired with facility, and are not so soon got rid of. It is quite possible, before one knows it, to nurse them into something serious. Of seven thousand two hundred and forty-two deaths the past year, seven hundred and forty-five were due to diseases of the throat and lungs.

These observations might easily be enlarged into a sizable volume, but they have already reached more than the limits originally intended. They will serve their purpose if they call attention to a subject which has of late become interesting to many. They may convince some of our readers that Rome has been in some respects more sinned against than sinning. Perchance a few of those who have enjoyed its attractions may even be led to ask themselves if they have been wholly void of blame in the matter.

Rome, March 8, 1875.

WEEKLY BULLETIN OF PREVALENT DISEASES.

THE following is a bulletin of the diseases prevalent in Massachusetts during the week ending May 1, 1875, compiled under the authority of the State Board of Health from the returns of physicians representing all sections of the State:—

Bronchitis, rheumatism, pneumonia, and influenza prevail in all parts of the State.

In Berkshire, whooping-cough has a local prevalence.

In the Connecticut Valley, diphtheria is more common than it has been during the last six weeks; it is especially prevalent in Greenfield and its vicinity. Intestinal disorders continue in Springfield. Wilbraham reports small-pox, and Shelburne cerebro-spinal meningitis.

In Worcester County, measles is increasing. Millbury has had cases of puerperal fever.

In the Northeastern counties, measles shows an increased prevalence, and "German measles" is reported from several towns. Natick reports that of sixty scholars in one school, forty-one have measles.

In the Metropolitan section, no noteworthy change has been reported. There has been a general subsidence of acute diseases.

In the Southeastern counties, measles and scarlatina have increased; "German measles" is reported.

The increased sickness reported in all parts of the State last week has not continued, and the present week's returns show a marked decline in the amount and gravity of the prevalent diseases.

F. W. DRAPER, M. D., Registrar.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING APRIL 24, 1875.

	Estimated Population.	Total Mortality for the Week.	Annual Death-rate per 1000 during Week.
New York	1,040,000	580	30
Philadelphia	775,000	337	23
Boston	350,000	159	22
Providence	100,000	30	16
Worcester	50,000	20	21
Lowell	50,000	17	18
Cambridge	44,000	24	28
Fall River	34,200	13	19
Lawrence	33,000	8	13
Springfield	33,000	8	13
Lynn	28,000	12	22
Salem	26,000	8	16

BOOKS AND PAMPHLETS RECEIVED.—Manual of Comparative Anatomy and Physiology. By S. Messenger Bradley, F.R.C.S. Third Edition. Philadelphia: Lindsay and Blakiston. 1875. (From James Campbell.)

Medical Vocabulary. By R. C. Mayne, M. D., LL. D., and J. Mayne, M. D., L. R. C. S. Fourth Edition. Philadelphia: Lindsay and Blakiston. 1875. (From James Campbell.)

Boston University Year Book. Edited by the University Council. Vol. II. Boston: Riverside Press. 1875.

Report on Monomania. Report on Dipsomania and Drunkenness. Report on General Paralysis. Papers read by D. A. Morse, M. D., before the Ohio State Medical Society in 1873 and 1874.

The Present Status of Electricity in Medicine. By William F. Hutchinson, A. M., M. D. Providence. 1875.

The International Scientific Series. The Chemistry of Light and Photography. By Dr. Hermann Vogel. New York: D. Appleton & Co. 1875. (For sale by A. Williams & Co.)

The International Scientific Series. Fungi: their Nature and Uses. By M. C. Cooke, M. A., LL. D. Edited by the Rev. M. J. Berkeley. New York: D. Appleton & Co. 1875. (For sale by A. Williams & Co.)

An Open Letter to the Members of the Massachusetts Medical Society. By E. E. Deniston, M. D. Boston: A. Williams & Co. 1875.

A Course of Lectures on Physiology, as delivered by Professor Küss at the Medical School of the University of Strasbourg. Edited by Mathias Duval, M. D. Translated from the second and revised edition by Robert Amory, M. D., formerly Professor of Physiology at the Medical School of Maine. Boston: James Campbell. 1875. (For sale by Noyes, Holmes, & Co.)

The Diseases of the Eye. By Henry W. Williams, A. M., M. D. Fourth Edition, revised and enlarged. Boston: H. O. Houghton & Co. 1875.

A Manual of Diet. By Thomas King Chambers. Philadelphia: Henry C. Lea. 1875. Cancroid or Epithelioma of the Lower Lip. Modified Operation for its Removal. By Middleton Michel, M. D. Charleston, S. C.

Clinical Studies with Large Non-Emetic Doses of Ipecacuanha. By Alfred A. Woodhull, M. D. Atlanta, Ga.

Valedictory Address to the Medical Graduates of the University of Louisville. By David W. Yandell, M. D. 1875.

Report of the Town Officers of the Town of Webster for the Year 1874-75.

Eating for Strength. By M. L. Holbrook, M. D. New-York: Wood and Holbrook. 1875.

The Model Physician and Model Patient. By Henry D. Didama, M. D. Syracuse, N. Y. 1875.

Transactions of the Medical Society of the District of Columbia. April, 1875.

Rupture of the Perineum, with a Description of a New Operation. By D. Warren Brickell, M. D. (Extracted from American Journal of the Medical Sciences.)

MILITARY APPOINTMENT.—Dr. Thomas Kittredge, of Danvers, appointed Assistant Surgeon of the Second Battalion of Artillery, M. V. M., to fill an original vacancy, passed a successful examination before the Board of Medical Officers, M. V. M., April 30, 1875.

EDWARD J. FORSTER,

Surgeon Fifth Regiment of Infantry, M. V. M., Recorder of Board.

RESIGNED AND DISCHARGED.—Ira B. Cushing, Assistant Surgeon of the Third (3d) Regiment of Infantry, M. V. M., April 27th.

ERRATUM.—The name of Dr. E. J. Forster was erroneously printed in the last number as Librarian of the Middlesex South District Medical Society.